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School of Medicine seminar will present new guidelines for conducting research

To acquaint Medical Center researchers with new guidelines for the responsible conduct of research, the School of Medicine will offer a half-day symposium on Thursday, Oct. 3, in Keefer Auditorium beginning at 8:30 a.m. Directed primarily at principal investigators and pre- and postdoctoral trainees, the session is open to the entire research community.

"With this program, we are formally presenting the basic rules for research and welcoming new trainees to a rigorous research climate that expects only the highest level of personal conduct," said symposium chairman Herbert Wotiz, Ph.D. "In recent months the University has issued a new policy on scientific misconduct and there have been scandals at other institutions. We want to be sure everyone at Boston University School of Medicine knows the rules."

The program will consist of brief instructional modules on the following topics: "The Boston University Policy on Misconduct in Scholarship and Research," by Michael Rosen, J.D., associate corporation counsel; "Minimum Standards for Laboratory Record-Keeping," by Robert F. Meenan, M.D., an associate professor of medicine, David J. Salant, M.D., an associate professor of medicine, and Nadia A. Rosenthal, Ph.D., an associate professor of biochemistry; "Outliers: Biostatistics or Ethics," by Herbert L. Kayne, Ph.D., an associate professor of physiology and biometrics, and socio-medical sciences; "Ethics and Laboratory Animals," by Jerrold Tannenbaum, J.D., a member of the BUSM Laboratory Animal Services Committee and author of *Veterinary Ethics*; and "Experimentation with Human Subjects," by Leonard Glantz, J.D., associate director of the School of Public Health.

"In planning this, we came up with dozens of issues, and I hope we will be able to offer a continuing series of seminars to explore other issues, such as conventions in authorship, whistle-blowing, and dealing with computerized records," said Wotiz. "One of the most difficult issues to develop rules for is keeping laboratory notebooks. Each lab has its own method, but there must be clear procedures for recording, dating and signing entries."

Collaborative study may pave the way for new tests for Alzheimer's disease

Two new studies on the causes of Alzheimer's disease (AD), which were conducted by researchers at the School of Medicine and Harvard Medical School, may provide the basis for more elaborate testing of the underlying causes of the disease.

As part of orientation, the entering Class of 1995 was welcomed at a reception and dinner sponsored by the Alumni Association. Pictured at the reception are Class of 1995 members, from left, Carol Lee, Steven Mendes and Edward Obedian. See story, p. 2. (Photo by Boston University Photo Services)

There is a great deal of controversy over the cause of Alzheimer's disease, which affects two million Americans. Some experts believe it is entirely genetic in origin. Other experts believe AD is environmentally caused.

The first of these new studies, published in the *American Journal of Human Genetics*, found that AD may be the result of a number of factors, including the transmission of a single major gene, the interaction of other genetic and environmental factors, or a combination of both mechanisms.

The second study, published in the *Archives of Neurology*, identified young paternal age as a factor that may increase susceptibility to the disease. According to the researchers, a 15-year-old male has a risk five times greater than a 50-year-old male of having a child who will develop late-onset AD. The association was seen only in cases of late-onset AD (those in which patients diagnosed were 67 years or older) and not in early-onset cases. The researchers caution that this study is not grounds for men to delay having children to reduce the risk of AD in their offspring.

"Ultimately, we hope to be in a position to discriminate genetically determined cases of AD from cases caused primarily by non-genetic factors, which will allow us to better assess the environmental factors that may contribute to the disease," said Lindsay Farrer, Ph.D., an assistant professor of neurology and public health at BUSM and the principal investigator of both

studies. "Once we have a better understanding of the underlying mechanisms of this complex disease we may be able to better predict, diagnose and treat it."

Orientation for the Class of 1995 features discussions on medical issues

A new professional code of conduct for physicians, racism and sexism in medicine, and the risk of chemical dependency among physicians were the major topics of discussion for the incoming class at the School of Medicine during orientation, which took place from August 27 to August 30.

"We want this new class of students to start thinking now about some very important issues that will confront them as physicians," said Arthur Culbert, Ph.D., associate dean of student affairs. "Putting these issues on the table the first week of medical school will, we believe, help students begin to address them long-term."

Among those attending the discussions were the 135 students who make up the Class of 1995. Thirteen additional students are in the M.D./Ph.D. program. The students represent 20 states, one U.S. territory, and one foreign country.

Other activities during orientation included a reception and dinner sponsored by the Alumni Association, and a trolley tour of Boston.

Search for gene linked to Wilson's disease narrows, improving testing for disease

Researchers have narrowed the location of the gene that causes Wilson's disease—a finding that will allow earlier and more accurate diagnosis and treatment of the disease. The study, published the July issue of *Neurology*, was conducted by researchers at BUSM and Stanford University School of Medicine.

Wilson's disease is an inherited disorder that affects about one in 30,000 people worldwide and is perhaps the most common cause of chronic liver disease in children. People with Wilson's disease are unable to rid their bodies of copper, which, although needed for normal metabolism, is very toxic in excess amounts. In Wilson's disease, excess copper is deposited in the liver and the brain. Left untreated, it can cause serious neurological or liver damage and eventually death.

Because the symptoms of the disease often mimic other illnesses and aren't evident until at least age five, early testing to prevent irreversible liver and brain damage is vital. Traditional biochemical tests that detect copper in organ tissues and invasive liver biopsies cannot be done under the age of two.

The authors of this study believe their new findings will enable very early detection of the disease. In the study, these scientists—who previously identified the chromosome that contains the gene for Wilson's disease—came closer to finding the gene's precise location by studying genetic markers on chromosomes of members of 50 families throughout the world with histories of Wilson's disease. They also found that the location of the Wilson's disease gene was the same in all the families, indicating that there is only one single gene that causes the disease.

Recent Alumni Association-sponsored reception gave incoming students a chance to mingle with faculty, staff and alumni. Pictured, from left, first-year students Marianne Augot, Wissam Khoory, Brian Hallstrom and Timothy Murphy talk with William R. Cranley '68, an associate professor of radiology and an assistant professor of pediatrics. (Photo by Boston University Photo Services)

"With this information we have developed a blood test that can detect the potential for Wilson's disease at a very early age, even prenatally," said Lindsay Farrer, Ph.D., the principal investigator of the study and an assistant professor of neurology. This means, he said, that physicians will be able to let parents know very early on if their child might have the potential for developing this disease. Thus, treatment with drugs that have been shown to bind with copper and deliver it from the body can be offered earlier, thereby preventing the onset of the disease.

Culbert appointed associate dean of student affairs at School of Medicine

Arthur J. Culbert, Ph.D., an associate professor of public health and socio-medical sciences and community medicine, recently was appointed associate dean of student affairs at the School of Medicine. In this position, Culbert will be responsible for providing support services for students as they complete their medical education at the School.

Culbert, who has been an associate dean of educational programs at BUSM since 1986, is recognized as a leader in developing new pathways of medical education. He has been an active participant in the development of the Modular Medical Integrated Curriculum program (MMEDIC) at BUSM since its inception in 1977. Culbert has expanded early admission programs to include a consortium of minority institutions through an arrangement unique among medical schools today. He is the initiator of the Early Medical School Selection Program (EMSSP)—the first and only program in the country designed to increase the number of minority physicians through an early admissions program.

In 1985, Culbert established the Laboratory for Instructional Technology at the School to provide computer-based technology

to both students and faculty, and he recently was involved in the first study to demonstrate that interactive video disc (IVD) instruction can improve medical students' performance.

According to Culbert, a dean of students in today's medical school must have an understanding of the educational process throughout all four years and the vision to establish the necessary support and advisory components to help students maximize their education. "An effective dean of students needs to ensure that students are well prepared in basic medical sciences, problem-solving and the care of patients," he said. "In addition, there is a need for an understanding of the ever-changing and evolving health-care systems into which our graduates will enter. That knowledge and vision for the future form the foundation of a student's education both inside and outside the medical-school classroom; that foundation will help produce the most effective physicians equipped for practice in the 21st century."

'Yo-yo' dieting leads to increased risk of heart disease, BUSM study shows

People who constantly lose weight only to regain it are at a significantly higher risk for dying of heart disease than those whose weight remains steady, according to a recent study by BUSM researchers.

The study, published in *The New England Journal of Medicine*, found that men who lost and gained about 20 to 30 pounds over a two-year period faced as much as two times the risk of dying from heart disease as those who maintained a steady weight. Women faced about one-and-a-half times the risk if they lost and then regained 15 to 20 pounds. The study was based on 32 years of follow-up data on 3,000 men and women ranging in initial age from 30 to 62 who participated in the Framingham Heart Study.

"It is fairly well known that being overweight raises the chance of heart disease," said Bernard E. Kreger, M.D., one of the authors of the study and an associate clinical professor of medicine at the School of Medicine. "What we are now starting to see is that people who go on diets may be at risk if they cannot keep the weight off," he said.

There may be several reasons for this increased risk, according to Kreger. "We believe it may have something to do with the kinds of food people eat as they regain weight. Often they are high in fat," said Kreger. "It may also mean that something happens to a person's metabolism during weight swings that changes a person's blood lipids, blood pressure and blood sugar—all of which can influence coronary risk."

The bottom line, noted Kreger, is that weight maintenance is as important as weight loss and unless a person keeps the weight off once it is lost, he or she will be at increased risk for heart disease.

Sixth annual BUSM faculty/staff phonathon sets a new goal

The sixth annual faculty/staff phonathon is scheduled to take place from Oct. 7 to Oct. 10, according to Dean Aram V. Chobanian. During the phonathon, BUSM faculty and staff members will be calling their colleagues to raise funds to benefit the Student Revolving Loan Fund.

"This year we hope to significantly increase the number of faculty and staff willing to contribute to the Student Revolving Loan fund through a monthly payroll deduction," said the dean. "Our faculty and staff have always been generous in their support of our student's needs, and I know that they realize that the financial stress on our students is great during these difficult economic times. Supporting the Student Revolving Loan Fund will help us to continue to attract outstanding students."

Interventional cardiology program to be held; cosponsored by BUSM

The School of Medicine and the American College of Cardiology are sponsoring the Second Annual Symposium on Interventional Cardiology: Aspirations for the 1990s. The program, directed by David P. Faxon, M.D., an associate professor of medicine, will take place from Oct. 3 to Oct. 5 at The Ritz-Carlton Hotel in Boston. Seminars to be presented during the program include: "Controversies in Thrombolytic Therapy," "Beyond Thrombolysis," "Changing Indications for Angioplasty," "Managing Restenosis after Angioplasty," "New Techniques in Angioplasty," and "New Diagnostic and Therapeutic Techniques."

In addition to Faxon, School of Medicine faculty participating in the program include: Michael A. Bettmann, M.D., a professor of radiology and chief of cardiovascular imaging at the University Hospital; John E. Brush, M.D., F.A.C.C., an assistant professor of medicine; Jesse W. Currier, M.D., an assistant professor of medicine; Gary R. Garber, M.D., F.A.C.C., an assistant professor of medicine and director of computer applications in cardiology at UH; Christian C. Haudenschild, M.D., a professor of pathology; Alice K. Jacobs, M.D., F.A.C.C., an associate professor of medicine and director of the Cardiac Catheterization Laboratory at UH; Nicholas A. Ruocco, M.D., F.A.C.C., an assistant professor of medicine and assistant director of the Animal Research Laboratory at UH; Thomas J. Ryan, M.D., a professor of medicine and chief of the Section of Cardiology at UH; and Richard J. Shemin, M.D., chairman of the Department of Cardiothoracic Surgery and chief of Cardiothoracic Surgery at UH.

Poehlmann receives sonography award

Harold Poehlmann, a research associate in neurology, will be presented with a $1,000 award from the Society of Diagnostic Medical Sonographers during the society's meeting in Nashville from Sept. 26 to Sept. 29. The award is in recognition of Poehlmann's article "Ultrasound as Used in the Framingham Heart Study," which was published in the *Journal of Diagnostic Medical Sonography*.

Upcoming CME courses

The following is a list of upcoming courses sponsored by the Department of Continuing Medical Education:

A course titled **"An In-Depth Review of What's New in Osteoporosis"** will be held on Oct. 4. at the Westin William Penn Hotel in Pittsburgh, Pa.

A program on **"Laparoscopy for the General Surgeon"** will take place from Oct. 10 through Oct. 11 at Boston University Medical Center.

From Oct. 10 through Oct. 12, a course titled **"The Problem Foot and Ankle"** will be held at Elbow Beach Hotel in Bermuda.

A seminar on **"Family Planning and Contraception"** will take place at the KPMG Peat Marwick Executive Conference Center in New York, N.Y., on Oct. 26.

A program titled **"The Aging Face: A Multidisciplinary Approach to Treatment"** will take place from Oct. 26 to Oct. 27 at Boston University Medical Center and at The Ritz-Carlton Hotel.

For further information on these and other courses, contact the Department of Continuing Medical Education, 80 E. Concord St., Boston, MA 02118, or call (617) 638-4605 (x4605).

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